UKRAINE ENERGY SECTOR RECOVERY: MITIGATING CORRUPTION RISKS

This paper is developed by the DiXi Group think tank for the European Anti-Corruption Initiative in Ukraine. The views expressed by the project do not necessarily represent official views of the EUACI, European Union, or the Ministry of Foreign Affairs of Denmark.

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Executive Summary

Ukraine’s needs for immediate recovery in the energy sector are as pressing as its ambitions in long-term reconstruction and economic transformation. According to the Rapid Damage and Needs Assessment (RDNA2), in **2023 alone, 3.3 billion USD should be spent in energy**. Total needs in energy and extractives, for the whole period of reconstruction (2023-2033) are estimated at 47 billion USD.

Yet despite the high total recovery bill and urgent need to secure stable energy supplies before the 2023/2024 winter season, **there is no single entity taking primary responsibility (ownership) for the reconstruction process**. As identified, among the actors responsible are Ukrenergo (~600 m USD), distribution system operators, the Ministry of Energy (~210 m USD), and the Ministry of Infrastructure jointly with the State Agency for Recovery (~700 m USD).

As the system for recovery and reconstruction management is being established, we identified and analyzed following options (models) of its design:

- **“Donors leadership”** with responsibility for project management, incl. procurement and corruption risks management, transferred to the international (donor) community;

- **“National leadership”** with full responsibility on entities (SOEs and public authorities) having the capacity to implement projects both under ‘standard’ public and donor procurement standards;

- **“Special (centralized) procedure”** with the Agency for Recovery being a key central governmental authority responsible, acting as ‘single window’ for the donor community and coordinating all the projects.

Depending on the design and role of respective players, different models of anticorruption ‘infrastructure’ - i.e. properly educated and trained staff that is responsible for ensuring transparency, integrity and preventing appearance of corruption practices - apply.

- With a **‘policy-focused’ state institution** model, the line ministry can only ensure transparency, engage sectoral experts, yet main compliance checks and corruption prevention burden is transferred to international donors.

- **‘Advanced’ state-owned company** model strongly relates to the established corporate governance structure and its independence (or protection) from political influence, as well as the track record of implementing energy modernization projects supported by the international donors. A **case** of Ukrenergo’s anticorruption system demonstrates different elements - identification of ‘risk zones’ and analysis in procurement, proper KPIs for authorized buyers, compliance officers’ controls and whistleblower tools.
● **Special state ‘recovery’ agency** is to build a new system of internal compliance, with commissioners and assessment procedures, anti-bribery management system - all crafted for serving the specific needs of recovery and reconstruction projects. In addition, the Agency for Recovery strongly focuses on transparency with application of electronic management system.

Along the project cycle, several issues were identified as gaps or inconsistencies bearing corruption risks - from initiation to post-implementation quality control.

First, **projects were not always properly documented** (e.g., defective acts as basic for assessing the level of destruction/damage and providing a clear understanding of further action). Additional features like land allocation, grid connection, feasibility studies, and other technical documentation prepared (e.g., energy audit report) indicate the degree of project’s readiness.

Second, **the procedures of selecting the projects so far either provide for discretion** (e.g. those supported from Fund for Liquidation of Armed Aggression Consequences) or could distort the results (popular voting Diia for those to be supported under the State Fund of Regional Development). Ukraine’s recovery would require a clear system of criteria for selecting among many projects in the energy sector, which shall take due account of feasibility, efficiency, alignment with long-term goals.

Third, **in post-implementation assessment, the technical side seems to be weak**, as the responsible agencies either referred to technical project documentation as a key ‘control point’ or post-project audits using standard instruments of state construction expertise and independent technical supervision. Only at the corporate level, quality control units and tools are applied. The National Energy and Utilities Regulatory Commission (NEURC) control functions are limited to spending under investment programs of its licensees, and the State Inspectorate for Energy Supervision (SIES) - to conformity checks of requirements of appropriate technical regulations (and only in the fields of electricity and heat supply). The latter is also heavily understaffed and limited in powers.

To improve the management of risks in energy sector recovery and reconstruction, we offer following recommendations:

- Agree on the acceptable proportion between Ukrainian and international ownership for recovery design. Consider an option to avoid channeling funds to the line ministries as their main function is policy making and they lack proper capacity. However, they should play a considerable role in the planning by providing programmatic inputs on energy sector development.

- Under government-led efforts, apply national public procurement procedures and budgetary spending regulations as established practices, with further improvement of transparency (e.g. opening access to the budget programs reporting) and integration with the DREAM ecosystem. Despite the war-related limitations (e.g. on location, technological details), the recovery milestones should be visible and trackable by all stakeholders. Any fast-tracking or exceptional approaches should be well-justified.

- Ensure sustainable and functioning corporate governance structure with a strong internal compliance system as a prerequisite to involvement of any state-owned companies into the process of management and control of recovery projects.
• Anti-corruption systems should be embedded into every stage of the project cycle and supported by financial and human resources. Proper capacity building, involving training of staff, compliance officers, and project implementation units (PIUs) professionals, should be a particular focus for the National Agency on Corruption Prevention as an entity responsible for coordination and methodological support to public institutions in identifying and eliminating corruption risks.

• Improve the provisional Methodology on prioritization of projects by including qualitative criteria on alignment with long-term national goals, adherence with network development plans / adequacy assessments;

• Remove regional state administrations as intermediaries in the process of projects submission, as the DREAM ecosystem rolls out, avoid distortion of spending due to results of public vote by either canceling the respective law or applying ‘cohesion policy’ criteria or coefficients to support remote/rural/deoccupied communities.

• While keeping the Agency for Recovery functions of coordinating the process, support decentralization of recovery by helping local self-government authorities in the documentation of projects and engaging technical expertise through PIUs, allocate resources to participatory budgeting and support to grassroots initiatives, making local NGOs, community self-organization entities as eligible initiators of recovery projects;

• Define clear requirements for independent post-implementation technical assessment, which could be performed by joint inspections of the State Inspectorate for Energy Supervision (SIES) and independent specialists hired as part of PIUs;

• Develop mechanisms for independent (external) control, clarify roles of public control authorities (State Audit Service, Accounting Chamber) and relevant sectoral authorities (NEURC, SIES, SAEE etc.). Consider strengthening capacities of SIES by ensuring full staffing and execution of its powers to critical infrastructure facilities in the fields of electricity, heat supply, and the natural gas market.

Introduction

Despite the raging Russian war, Ukraine has already encountered the need in developing a strategic vision regarding the post-war reconstruction. Undoubtedly, this topic has dominated both Western political agenda and Ukrainian political elites, helping to sustain an optimistic public sentiment for Ukraine’s future development. However, when it comes to specific frameworks and institutional settlements for the post-war recovery and modernization of Ukraine involving frozen Russian assets, as well as direct Western grants and private investments, more clarity is still needed from both sides. Ukraine presented its rather fragmentary vision of numerous projects at the Lugano conference in 2022, having agreed on seven Lugano Principles as those guiding the recovery process, and was also quite ambitious in plans to transform the economy at London’s Ukraine Recovery Conference in June 2023. The Western aid tends to come as individual contributions to individually chosen projects in the most war-affected areas.
Yet in the energy sector, after conducting interviews with key stakeholders, we could not identify a single entity taking primary responsibility (ownership) for the reconstruction process. Neither the Ministry of Energy, nor the NEURC or other sectoral agencies, nor the state-owned companies that are natural monopolies (e.g., PrJSC NPC ‘Ukrenergo’ in power transmission) or special reconstruction & development agencies have a holistic vision about priorities of the energy recovery & reconstruction projects, distribution of responsibilities, planning and control functions, and operational model with international donors.

However, the key stakeholders in the energy sector have, at least, started to develop their understanding about the immediate (until the beginning of 2023/2024 winter season) and long-term needs. According to the RDNA2, among 14 billion USD of priority investments for 2023, 3.3 billion USD should be spent in energy - namely, 2.1 billion USD on core infrastructure (0.7 billion USD to be covered by government capital expenditures and 1.4 billion USD by SOEs) and 1.2 billion USD on payments to operators (including 1 billion USD for gas purchase and additional provisions to purchase electricity and to meet liquidity needs of systems operators). Total needs in energy and extractives, for the whole period of reconstruction (2023-2033) are estimated at 47 billion USD.

**Recovery and reconstruction needs (million USD), as of February 24, 2023**

<table>
<thead>
<tr>
<th>Category</th>
<th>Types of activities/investments</th>
<th>Short term (2023–2026)</th>
<th>Medium to long term (2027–2033)</th>
<th>Total (2023–2033)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power sector</td>
<td>Power sector reconstruction, including transmission system operator, distribution system operators, power generation facilities</td>
<td>2,962.7</td>
<td>34,070.8</td>
<td>37,033.5</td>
</tr>
<tr>
<td>District heating</td>
<td>District heating reconstruction, including heat supply networks, heating points and heat-only boiler houses, combined heat and power generation facilities</td>
<td>747.4</td>
<td>1,743.9</td>
<td>2,491.3</td>
</tr>
<tr>
<td>Gas transportation</td>
<td>Gas transportation system reconstruction, including gas transmission system operator and distribution system operators</td>
<td>377.1</td>
<td>2,136.7</td>
<td>2,513.7</td>
</tr>
<tr>
<td>Fuel oil sector</td>
<td>Fuel oil sector reconstruction, including oil refinery facilities and distribution networks</td>
<td>339.5</td>
<td>3,055.4</td>
<td>3,394.8</td>
</tr>
<tr>
<td>Coal mining sector</td>
<td>Coal mining sector (urgent closure works on flooded mines, not currently under government control)</td>
<td>48.0</td>
<td>272.0</td>
<td>320.0</td>
</tr>
<tr>
<td>Service delivery</td>
<td>Power sector liquidity needs</td>
<td>200.0</td>
<td>-</td>
<td>200.0</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
<td>5,706.6</td>
<td>41,278.8</td>
<td>46,985.4</td>
</tr>
</tbody>
</table>

*Source: Rapid Damage and Needs Assessment (RDNA2)*
Estimated 2023 implementation priorities (US$ million) as of February 24, 2023

<table>
<thead>
<tr>
<th>Category</th>
<th>Types of priority activities/investments</th>
<th>Estimated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruction needs</td>
<td>Ukrenergo’s emergency equipment needs (in government-controlled areas)</td>
<td>466.0</td>
</tr>
<tr>
<td></td>
<td>Development of secure power grid (protected substations of Ukrenergo)</td>
<td>500.0</td>
</tr>
<tr>
<td></td>
<td>Statcoms to enhance import-export operations</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>Building of transmission connections with EU/Slovakia</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>Building of transmission connections with EU/Romania</td>
<td>60.0</td>
</tr>
<tr>
<td></td>
<td>Large Hydro Power Plants restoration for season 2023/2024</td>
<td>63.0</td>
</tr>
<tr>
<td></td>
<td>TPP restoration for heating season 2023/2024</td>
<td>167.0</td>
</tr>
<tr>
<td></td>
<td>Small-scale/distributed generation</td>
<td>275.0</td>
</tr>
<tr>
<td></td>
<td>Electricity supply (including distribution stations, overhead power lines)</td>
<td>193.0</td>
</tr>
<tr>
<td></td>
<td>Emergency equipment for heating infrastructure (mobile units)</td>
<td>200.0</td>
</tr>
<tr>
<td></td>
<td>Heat supply (including heat-only boiler houses, district heating network, heating points, combined heat and power)</td>
<td>81.1</td>
</tr>
<tr>
<td>Service delivery restoration needs</td>
<td>Gas purchasing needs for the next heating season</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>Electricity import purchasing needs for the next season</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Other gas system liquidity needs</td>
<td>31.8</td>
</tr>
<tr>
<td></td>
<td>Other power sector liquidity needs</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>District heating liquidity needs</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>3,306.9</strong></td>
</tr>
</tbody>
</table>

*Source: Rapid Damage and Needs Assessment (RDNA2)*

As identified as a result of our requests and interviews, the following actors would bear responsibility of the mentioned projects:

- **Ukrenergo** (~600 million USD) - restoration of the high-voltage grid (466 m USD), installation of STATCOMs for import-export operations improvement (~40 m USD), enhancing interconnection with the EU (~90 m USD);
- **Distribution system operators** - restoration of the distribution networks;
- **Ministry of Energy** (~210 m USD) - restoration and putting back into operation the damaged power generation facilities (namely state-owned thermal power plants, private TPPs and 6 local combined heat and power plants\(^1\), hydro power plants\(^2\)), purchase, installation and integration of the gas piston power units\(^3\), installation of PV power plants and energy storage facilities;
- **Ministry of Infrastructure jointly with the State Agency for Recovery and Development of Infrastructure** (~700 m USD) - construction of protective structures for energy infrastructure, restoration of local centralized heat supply facilities.

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\(^1\) It will add 1734 MW of electrical capacity to the 2023/24 heating season.

\(^2\) It will add 540 MW of electrical capacity to the 2023/24 heating season.

\(^3\) It will add between 300 MW and 500 MW of electrical capacity to the 2023/24 heating season.
Part 1. Recovery process design

The coherent approach to recovery and reconstruction process design has currently only begun to be considered by Ukraine and its Western allies. We identified during the interviews with the governmental stakeholders in Ukraine that it may involve the following options (models), each having its potential pros and cons:

I. “Donors leadership”:

→ Such an approach has been offered by the Ministry of Energy representative under an assumption (on the financial side) that the dominant share of recovery funding for the energy infrastructure would be provided by the international donors in the form of grants and loans with specific clauses on responsibility in respective agreements.

→ On the procedural side, the approach is to transfer the responsibility for procurement for infrastructure reconstruction projects to the international (donor) community as the only way to properly mitigate corruption risks. Specifically, under such logic, Ukraine would receive the ready-to-use products (equipment/services) that have been procured by IFIs (World Bank / UNDP / UNOPS / other) or an international agency (USAID / Crown Agents / RARS / other). Therefore, corruption risks would be transferred to and managed by the international partners, while the Ukrainian authorities / SOEs will be performing only implementation / coordination functions.

→ In terms of mitigating potential corruption risks, donors will be completely flexible in applying the appropriate procurement procedures (regulations), e.g. between direct selection of contractors or tendering. There would be no ‘vendor lock’ in terms of different producers, only geographical limitations may be applied (to prevent equipment supply from Russia, China, Iran and other countries under sanctions).

→ Although the Ministry welcomes preferential treatment of Ukrainian companies during the contractors’ selection process, it does not consider such localization as a mandatory clause. The same issue is related to the requirement of contractors’ due diligence and other compliance checks. Therefore, the main role of the government agency would be a service one by providing pre-project assistance to donors and controlling performance of new equipment.

PROS:

• It potentially means the highest possible level of predictability and transparency in terms of equipment/services procurement, as all the frameworks have been already developed and

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4 However, the Ministry also considers proposing amendments to the 5-7-9 soft loans program so that private operators mentioned in the order (list of entities and generation units to be restored) would be eligible to apply. The prospects are not clear, as the Ministry of Finance is not ready to support; also, eventually the final decision on soft loan would be up to the bank. Compliance with state aid rules is not considered as an issue, no financial guarantees would be provided.
applied by the international donor community with properly embedded safeguards against corruptive practices.

- Such an approach has the highest chances to be supported by the international community also in terms of accumulation of direct Western funds, the majority of which are still being only pledged (the perspective of frozen Russian assets transfer to Ukraine is still vague).

- Ukraine’s energy sector and some national energy companies, in particular, have already accumulated positive experience of implementation of IFIs-funded projects over the last decades that would allow the process not to be stuck at the beginning, at least.

- It opens vast possibilities for public monitoring of related expenditures by the non-governmental actors as the IFI’s projects are usually opened to the public. The monitoring instruments may vary from the open access to specially designed digital recovery coordination platforms like the recently announced DREAM⁵ to specific CSO’s monitoring instruments like the Energy Transparency Index developed by DiXi Group⁶.

**CONS:**

- In general, IFI’s procedures are lengthy and require substantial time and administrative efforts that not many Ukrainian stakeholders may allow. Unfortunately, in the situation of ongoing war, the factor of time in satisfying at least immediate recovery needs (that should be implemented before the start of 2023/24 winter season) is still crucial. Such a speed couldn’t be obviously delivered under such a model, with risks of entering the winter in the worst possible condition.

- Too much reliance on international donors also implies a deficit of local ownership (and thus responsibilities) in implementation of recovery projects as well as (so badly needed) lack of incentives for capacity building of Ukrainian public institutions. It may have particularly negative consequences in the case when some portion of international funds would be channeled as a direct budgetary support to Ukraine in the environment of low absorption capacity by the Ukrainian recipients⁷.

**II. “National leadership”:**

→ The approach, as articulated by Ukrenergo and the The State Agency on Energy Efficiency and Energy Saving (SAEE), means that Ukrainian authorities are capable of building the capacity of transparent and efficient modernization projects both under ‘standard’ national public procurement procedures and projects led by international donors under the IFIs procurement rules.

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⁵ Digital Restoration Ecosystem for Accountable Management (https://dream.gov.ua/) developed by the Ministry of Infrastructure and RISE Coalition of selected SCOs.

⁶ See the detailed summary of the Index for different years (2022 the latest) and detailed report: https://index.ua-energy.org/en/

⁷ Almost 62 billion UAH have been accumulated under the Fund for Liquidation of Armed Aggression Consequences as one of the main sources of funding for reconstruction, while the government has allocated only 23.5 billion UAH for various recovery projects (as of late June 2023).
Ukrenergo has vast pre-war experience in implementation of modernization projects, from both its own investment resources and funds provided by international donors, and has quite a high level of donors' trust. In the meantime, the company has the largest portfolio of recovery and reconstruction projects of about 460 million USD (see above), given the level of damage caused by targeted Russian missile and drone attacks since October 2022.

However, even having the full capacity for IFIs’ funds absorption from the procedural point of view, Ukrenergo representative argued that international donors / IFIs would have at least a decisive impact on rules and procedures or even control them directly. The Ukrainian side could mitigate project risks by providing sovereign guarantees (the Ministry of Finance being responsible).

SAEE has been promoting an option of allocating international funds via state budget and the mechanism of direct budgetary spending with differentiation by respective expenditures line (state programs tool). The Agency representative believes that the national procurement rules and procedures for budgetary spending and public procurement (via Prozorro system) provide for a sufficient level of transparency as an ecosystem for energy sector recovery spending.

**PROS:**

- The major positive outcome is building of implementation capacity by the national authorities and companies in the energy sector as they would gain experience in getting through all the stages of donor-driven projects, including development of proper anti-corruption prevention measures and transparency rules.

- Reconstruction in the energy sector would provide quite a unique opportunity to involve as much as possible of national actors into a project implementation ecosystem that is also used by major IFIs. It would lead to different positive spillovers and better absorption capacity of any modernization (investment) projects financed by the donors or international private capital.

- Local ownership would be much stronger under this model, positively affecting the identification of immediate and long-term needs, communication to local authorities and better involvement of local vendors.

**CONS:**

- The projects implementation in terms of spending would be at risk of locking in mainly to national budgetary spending regulations with transparency that has substantially deteriorated since introduction of the martial law.

- Only few entities have sufficient knowledge and absorption capacity to manage and control all stages of the project cycle of such level of complexity (in terms of applicable PM and transparency standards). Substantial time and effort would be required to expand such skills to other engaged stakeholders.

- To meet at least minimum requirements of international donors (in terms of standards), amendments to national procurement and budgetary regulations may be required that is usually a time-consuming process.
III. “Special (centralized) procedure”

➔ Despite the Agency for Recovery currently operates a tiny portion of public funds for recovery needs (as stated, 5 million UAH from the Fund for Liquidation of Armed Aggression Consequences), it is positioning itself as a key central governmental authority responsible for raising the international funds, and coordination of recovery and reconstruction projects.

➔ Specifically, for the energy sector, the Agency understands its role in channeling of Western funds to other central executive and local authorities that would apply their requests for funding needs and recovery / reconstruction projects on protection of critical energy infrastructure on a fast-track procedure to the Agency (that is designated as a main executor of the appropriate budget program). This interagency mechanism is set to be regulated by the Cabinet of Ministers Resolution No 1482\(^8\) of December 27, 2022, as temporary (until the end-2024) and experimental measure justified by the need of accelerated construction of protective structures for the energy sector facilities during the war.

➔ In terms of procurement, all the purchases of equipment / services are supposed to be conducted also according to a special procedure of public procurement during martial law that was stipulated by the Cabinet of Ministers Resolution No 1178\(^9\) of October 12, 2022. This procedure foresees concluding of direct contracts between the Agency and contractors without conducting tenders. The CSOs may be granted access to the procurement details, however, under the NDA option only.

PROS:

• Establishment of the ‘special lane’ for urgent recovery needs in the energy sector has a significant advantage (as compared to other options) – speed of project implementation as it omits ordinary stages of state- or donor-funded reconstruction projects that consume significant time and human resources.

• Such a model may be much simpler for the international donor community in terms of identification of priorities, its management and implementation control as it de-facto offers a ‘single window’ approach for cooperation with the Ukrainian side.

CONS:

• Establishment of ‘special procedures’ of any kind would inevitably lead to strong centralization of the recovery process (all projects are managed by one government agency) under condition of public procurement during martial law (with many tendering, transparency and reporting
requirements suspended). That would open more space to potential abuse and corruption practices.

- The Agency is a ‘non-energy actor’ per-se (it was established on the basis of the former State Agency of Automobile Roads of Ukraine) and has weak understanding of the actual situation and specifics of the different segments of the energy sector. It leads to problems of coordination between the Agency and numerous stakeholders inside the energy sector and dilution of responsibilities (each side tries to ‘ping-pong’ the burden of project preparations).

- Apart from the energy sector projects, the Agency has also been overburdened by other sectoral recovery projects, mainly urgent recovery of roads, bridges and social infrastructure (hospitals, schools etc.) in the recently de-occupied regions. It significantly deteriorates the implementation capacity of the Agency (at current stage); to tackle an issue of coordination of all sectoral recovery / reconstruction assistance from the Western partners of Ukraine, the Agency needs to be transformed into a ‘super-central executive’ authority that would again take substantial time and resources.

**Recommendations**

- **The proportion between local and international ownership** for recovery projects design covering their initiation, management and post-implementation control should be agreed and fixed between Ukraine and international donors before the large-scale process starts. This would help to avoid dilution of responsibility for reaching recovery outcomes, ensure clarity in application of project management (PM) and transparency standards, and support initiative from the local stakeholders, esp. governmental agencies and companies (to avoid ‘responsibility burden’).

- **Increasing the capacity of Ukrainian authorities and companies** in the energy sector to tackle internationally supported recovery and reconstruction projects should be a key task for both parties of the process (Ukraine and international donor community). The past, pre-war experience of donor-funded modernization projects, shows that it is unlikely that Western donors would lower down their standards due to low absorption capacity of the national stakeholders. And vice-versa, any implementation failures at initial stages of the recovery process would lead to lower willingness to inject the next tranche of funds.

- The recovery process design should be built upon the **best international transparency practices embedded also into the national public procurement procedures and budgetary spending regulations**. Of course, during the war there may be some limitations imposed (e.g. for location / technological details) but the recovery milestones should be visible and trackable by stakeholders, incl. CSOs. E.g., development of checklists for project implementation stages monitoring, opening access to the budget programs reporting (see DiXi Group’s Energy Transparency Index 2022 for reference).

- **Building a decentralized system** for projects implementation on ‘ground level’ would avoid many corruptive practices and promote coordination between different national/local governmental stakeholders in the energy market. However, the Agency for Recovery functions by raising the

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10 [https://map.ua-energy.org/en/analytics/9ab037c4-54c1-4e53-9d73-d4ba0ada94b6/](https://map.ua-energy.org/en/analytics/9ab037c4-54c1-4e53-9d73-d4ba0ada94b6/)
international funding and coordinating the donor community efforts may add greater value to the process.

Part 2. Projects initiation and selection

In the conditions of resource scarcity, Ukraine’s recovery would require a clear system of criteria for selecting among many projects those subject to recovery. As multiple sectors need support, proper selection of projects in the energy sector shall take due account of feasibility, efficiency, coordination and priority of implementation.

One of the lessons learned is the need for coordination. E.g., reconstruction of the district heating system in Okhtyrka was performed in parallel by the government, which allocated 86.5 million UAH from the reserve fund for recovery of the local CHP boilers, and Naftogaz, which invested millions in the construction of the 40 MW biomass CHP. This resulted in inefficient public spending and little use of the bioCHP capacity, as the new district heating scheme for the municipality is still being developed.

In this regard, alignment with long-term goals should become a criterion for consideration. Support for new construction by energy companies or reconstruction of energy systems should be based on the results of energy audits or implemented energy management systems. New facilities in district heating should be integrated into a more general urban development / district heating scheme, in electricity – based on 10-year network development plans and generation adequacy assessment. Otherwise, the spending would be inefficient creating stranded assets (e.g. capacity not used due to system constraints) or additional cost (e.g. for major network development).

Another mistake which should be avoided is populism as a principle of making decisions related to infrastructure recovery. The government advocated and managed to pursue adoption of a draft law which changes the principle of selecting investment projects under the State Fund of Regional Development. In particular, it prioritizes 11 regions which suffered most of the destruction (which is good), yet after initial selection of projects by a commission of the Ministry of Regions, Territories and Infrastructure Development, they should be published for open voting of citizens at the Single State Portal of Electronic Services (Diia). Such an approach would provide more support for bigger urban communities and disincentives for rural communities with many residents having left and residing elsewhere as IDPs. Moreover, for some communities it would be the recovery of life-supporting (a hospital or a school) and energy infrastructure which will create grounds for the residents to return.

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11 As of May 2023, about 5 000 projects were introduced by local authorities into the sector infrastructure recovery management system (part of the DREAM ecosystem).

12 https://ips.ligazakon.net/document/ji09029a?an=11
Experts criticized the decision as such which destroys the system of planning, implementation and financing of the state regional policy, which began to be developed according to European approaches. So far, the government has clarified that priority projects should be aimed at developing, rebuilding or constructing critical infrastructure, housing and utility facilities, hospitals, administrative service centers, security centers and shelters, strengthening the regional and local economy in the face of martial law challenges, and/or creating conditions for the relocation of production facilities.

In addition, one should differentiate between early recovery needs and foundations to support medium and long-term economic growth. For instance, cities in the east of Ukraine were built around large enterprises and mines. After de-occupation, much will depend on whether those city-forming elements could be recovered from damage, and popular vote would drive the decisions away from long term priorities (build back better) such as implementing the policy of coal regions transition (closing down mines, creating new industry clusters).

Everything starts with a clear set of criteria what to consider a ‘project’. The Ministry of Energy has collected sector-aggregated needs for immediate recovery (excl. the cost of energy imports for the next winter season) from the companies. The numbers provided to the Ministry were not verified independently, but on average correlate with the available market estimates (Ukrenergo’s dispatching assessment of power generation needs) and were communicated to the donors as the background data for assessment of both aggregate and sector-specific needs in recovery. Based on this high-level input, the Ministry of Energy and the Ministry of Infrastructure adopted a list of generation units to be recovered (repaired) by autumn-winter 2023/2024.

According to the NEURC, the projects submitted were not always based on defective acts – which are basic documents to assess the level of destruction and provide a clear understanding of further action (options include current repair, major repair, reconstruction, new construction). Additional issues like land allocation, grid connection, and other documentation prepared (e.g., energy audit report) indicate the degree of project’s readiness. The Ministry of Infrastructure publicly acknowledges the lack of feasibility studies and technical documentation for potential projects.

Second, the very procedure of selecting the projects so far provides for discretion.

Under the Fund for Liquidation of Armed Aggression Consequences, determination of the needs and selection of critical infrastructure facilities in the energy sector, which are subject to construction, repair, as well as other engineering and technical measures for their protection, is performed by the Ministry of Energy. More details are unknown, as the list of facilities and types of protection is classified, technical ToR is developed by the Ministry and Ukrenergo.

As for district heating, water supply and other utilities (e.g. municipal power supply and street lighting), the projects are initiated by local self-government authorities which submit requests to regional administrations, and the latter submit them directly to relevant ministries, e.g. the Ministry of Energy.

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14 The government endorsed a plan to restore 1,710 MW of generating capacity in 2023.
15 Based on an interview with the NEURC representative.
ministries consider the requests for compliance with the requirements of the Procedure for the use of Fund funds, as well as analyze feasibility, efficiency, compatibility and priority of the proposed projects, taking into account the priority needs of communities. Further, the ministries formulate generalized proposals for the funds allocation, with a list of projects and relevant justification, for approval at the Interagency Working Group.

However, as representative of the Association of Ukrainian Cities claims\textsuperscript{16}, the regional administrations can reject the community recovery plans, asking for improvements, while there are no clear criteria for checking the plans ‘correctness’. This creates corruption risks for the regional administrations to decide which projects will be later supported.

In later stages, some work has been done to improve projects’ selection. Even the Ministry of Infrastructure acknowledged the need of technical expertise to be engaged through support teams and project implementation units. By the CMU Resolution No.323 of April 11, 2023\textsuperscript{17}, the Ministry of Infrastructure was instructed to develop and approve Methodological recommendations on prioritization of projects. Such a methodology is being developed by the Ministry and the World Bank.

At the same time, in the first meeting of the Interagency Working Group to considers proposals on allocating funds from Fund for Liquidation of Armed Aggression Consequences, a provisional prioritization methodology was applied\textsuperscript{18}. It was developed by experts of the Ministry of Infrastructure together with the CSO coalition RISE Ukraine and provides for an assessment of the compliance with the reconstruction priorities, resulting in a specific indicator. The priority is calculated according to a formula, which includes such indicators as scope (the number of people who would benefit), cost per person affected, urgency, as well as indicators of additional impact (energy efficiency, quality of the environment, inclusiveness, creation of new jobs etc).

**Recommendations**

- Further **improve the provisional Methodology on prioritization of projects** by including qualitative criteria on alignment with long-term national goals, adherence with network development plans / adequacy assessments for medium- and long-term recovery;
- **Regional state administrations should not act as intermediaries** in the process of projects submission, as the DREAM ecosystem rolls out and the project initiators directly submit requests;
- Focus on **supporting the local self-government authorities in improving the documentation** of the projects (e.g., checklists and typical forms on such necessary components as defective acts, full cost estimation, feasibility etc.) and **engaging technical expertise** through project implementation units;
- **Avoid distortion of spending due to results of public vote for the projects** via Diia (which is a populist practice imitating public participation) by either canceling the law or applying ‘cohesion policy’ criteria/coefficients to support remote/rural/deoccupied communities. A better approach would

\textsuperscript{16} https://www.rbc.ua/rus/news/k-i-chiy-rahunok-ukrayina-vidbuduvuvatime-1684856143.html
\textsuperscript{17} https://zakon.rada.gov.ua/laws/show/323-2023-%D0%BF#Text
\textsuperscript{18} https://www.facebook.com/Ministry.for.restoration/posts/617977610370424
be to channel energy of the society to **participatory budgeting** (best practice) and **support to grassroots initiatives** (local NGOs, community self-organization entities as eligible initiators of recovery projects).
Part 3. Anticorruption ‘infrastructure’

Stakeholders interviewed revealed different levels of development and preparedness of their agencies’ anticorruption ‘infrastructure’ to serve the needs of future recovery and reconstruction projects. While referring to anticorruption ‘infrastructure’, we mean the properly educated and trained staff that is responsible for ensuring transparency, integrity and preventing appearance of corruption practices at every stage of reconstruction project management, from initial planning to post-project quality implementation control. The intention was to look beyond merely those mandatory structural units (persons) with the role of preventing and detecting corruption which shall be formed according to the Law “On corruption prevention”.

The situation differs from the entity to entity, however, we have summarized the most typical options as the following:

I. ‘Policy-focused’ state institution (e.g. the line ministry):

➔ Usually, due to its specifics as a policy-maker it does have neither substantial experience in project implementation, established Project Implementation Units (PIUs) and proper Compliance Service, nor sufficient staff for managing the process of public procurement and monitoring potential corruption cases.

➔ Such institutions support the idea of conducting post-project audits and development of reporting systems, and are usually capable of providing support to representatives of the donor community that would carry on the project’s implementation. However, they have no capacity to build the full-scale system of post-project quality control (see next section for details).

➔ Interviewed representatives agreed about the necessity to develop the transparency requirements to the projects implemented under their umbrellas and give access to data and key processes to non-governmental actors after receiving donors’ approval. E.g., engagement of sectoral experts into the process of checks and controls throughout the stages of the procurement cycle.

➔ However, they try to transfer the main compliance checks and corruption prevention burden to international donors arguing that ‘a funding provider should also control integrity and transparency at all project stages’.

II. ‘Advanced’ state company (e.g. Ukrenergo):

➔ There are not many examples of such state-owned companies, but they all have two key distinctive features – (1) successfully implemented corporate governance reform and build-up of proper corporate structures, incl. the anti-corruption one, and (2) experience of active participation in the modernization projects supported by the international donors.

➔ Proper functioning of the anticorruption infrastructure at a company level strongly relates to established corporate governance structure and its independence (or protection) from political influence. Independent and professional supervisory board, merit-based selection of top-management creates proper environment for corruption prevention/compliance units and
procedures inside the company and its ‘protection’ against malicious interference of external actors.

Such interference is usually manifested via appointment of controlled CEO and high-level executives that are informally assigned with tasks that develop corruption schemes in favor of such actors. In such an environment, even the formal well-set anticorruption infrastructure is quickly giving up to pressure from management level having no formal means to resist, at least to large-scale corruptive interference.

Regarding specific issues of corruption prevention measures at every stage of modernization projects, such companies have already enacted a comprehensive corruption risks evaluation system throughout all the stages of the project cycle.

For example, Ukrenergo’s system for procurement of equipment and services is based on the principle of **identification of ‘risk zones’** such as (i) inflated prices, (ii) biased selection of contractors that manipulate the quality of equipment / services, etc.

Further on, it tries to assure the highest possible competitive environment at tenders and guarantee procedural transparency. The core element is **authorized buyers** - specialists responsible for the whole procurement with a number of bidders as their KPI (i.e. incentivized to promote equal treatment and non-discrimination). One of their important functions is preparation of adequate ToRs for procurement lots. There are also **compliance officers’ controls and an anonymous hotline** used by them for investigating and prosecuting violations.

Other specific anti-corruption measures involve the following elements:

1. **Cartel agreements:**
   - suspicious price behavior of contractors at tenders are **investigated and monitored by the company’s compliance officers** (information on suspected plots submitted to the Antimonopoly Committee);
   - continuous **checks of tenders’ winners on affiliation** with company’s staff, political stakeholders, industry business ties etc. by using YouControl instrument;

2. **Ensuring sufficient competition:**
   - mitigated by **control over so-called ‘business processes’**, i.e. stages of tendering (proper planning of procurement and number of compliance checks throughout the process);
   - **KPI of the authorized buyers** are linked to a number of bidders (the more - the better) and not to a number of investigated corruption cases or other compliance procedures;

3. **Monitoring of procurement prices:**
   - **analysis of price parameters** and identification of the cases of illegal agreements between company’s procurement staff and representatives of contractors.
As seen from above, a well-developed system of corporate compliance covering design, implementation, and monitoring of policies, training, procedures and practices is a significant asset in the corporate anti-corruption ecosystem. The key factor of successful operation of the corporate compliance is **assuring the real independence of Chief Compliance Officer (CCO) position that is strongly backed by the independent Supervisory Board.** The CCO is directly subordinated and reporting directly to the Supervisory Board and its performance (and KPIs) has no links to the company's operational performance and influence by the management\(^\text{19}\).

### III. Special state ‘recovery’ agency (e.g. the Agency for Recovery):

- It has actually to build the new specific anti-corruption infrastructure crafted for **serving the specific needs of recovery and reconstruction projects** funded by the international donors. The issues of corruption and/or misuse of provided recovery financial assistance are crucial for Ukraine’s success, hence posing the strictest possible requirements in this regard for a profile Ukrainian state agency.

- For example, the newly established Agency for Recovery is currently considering build-up of a multi-layer anti-corruption infrastructure under technical assistance from donors, involving the following segments:

  1. System of **internal compliance** (currently, the Agency is identifying the typology of data and information with different levels of access, developing the compliance regulations for cooperation between the central office and regional Agency branches, rules for interaction with the law enforcement agencies etc.).

  2. Institute of **anti-corruption commissioners** (this task is considered as urgent inside the Agency and is implemented under support of the Basel Institute on Governance).

  3. **Corruption risks assessment procedure** (developed under the support of the EU Anti-Corruption Initiative (EUACI) with a typical anti-corruption program as the main output).

  4. Implementation of **ISO 37001:2016 standard** to put in place an effective **anti-bribery management system** (supported by the USAID).

- Additional efforts are going to be invested into better transparency after a new **electronic document management system** and typical **e-documentation** for all stages of the project implementation cycle. Also, the Agency is planning to establish a procedure of **additional technical expertise** for protective structures construction as many of them require development of completely new technical design regulations. This expertise will include step-by-step procedure for value conformity checks for each construction stage that would sufficiently prevent the projects’ costs inflating by contractors.

As a result of studying already established systems/tools or plans regarding development of anticorruption infrastructure, we identified ways to address specific gaps (risks) for transparent and coherent implementation of the recovery and reconstruction projects in the energy sector.

\(^\text{19}\) The negative case of Energoatom’s Compliance Officer dismissal by top-management suspected of corruption only illustrates the importance of such structure.
Recommendations

- **Consider an option to avoid channeling funds for project’s implementation to the line ministries** as their main function is policy making and they lack proper capacity to conduct and control the necessary procurements. However, the ministries should **play a considerable role in the planning process** as the players knowing the needs and future development trajectories of their sectors of the economy.

- **Sustainable and functioning corporate governance structure** with a strong internal compliance system should be a prerequisite to involvement of state-owned companies into the process of management and control of recovery projects. It is considered as a sufficient safeguard against high-level political corruption and would guarantee the positive financial flows by the international actors.

- The key effort for implementing bodies should be made into development of a proper anti-corruption ecosystem that is **embedded into every stage of the project cycle**, from planning to post-implementation control with a special emphasis on procurement process.

- **Anti-corruption environment should be properly supported by financial and human resources as well as proper staff training and capacity building**, involving i.e. compliance officers, verification officers and PIU professionals. The **National Agency on Corruption Prevention (NACP)** plays a key role as the center of excellence responsible for coordination and methodological support to public institutions in identifying and eliminating corruption risks in their activities, and controlling the implementation of respective anti-corruption programs.

Part 4. Post-implementation assessment

Many respondents, including the Ministry of Energy, have clearly indicated they have neither functions (authority) nor sufficient capacity for control of project implementation and quality of supplied equipment / conducted services. The controlling functions could be executed under respective government agencies like the **State Audit Service and the Accounting Chamber**, yet only in case of public funding or donor-funded public spending. For other models of recovery, depending on design, this could be specific independent entities (auditors) or those beneficiaries who would receive new assets on their balance sheet.

Specifically in the energy sector, such assessment could be performed by the **State Inspectorate for Energy Supervision (SIES)** subordinated to the Ministry of Energy but its functions are limited to conformity checks of requirements of appropriate technical regulations - and only in the fields of electricity and heat supply. This covers the technical parameters of supplied equipment but is obviously not sufficient for unveiling corruption cases after project implementation. In addition, to our knowledge, SIES staff is composed mostly of former Ukrenergo specialists, which may under certain conditions create conflict of interest. The suggested solution could be joint inspections by SIES and independent external specialists.
The SIES could play a role as it received additional tasks to inspect reconstruction and modernization of power plants’ equipment and participate in the activity of commissions which confirm the readiness of electricity facilities to operate in the autumn-winter period. It has also proposed several draft legislation, aiming a comprehensive reform of state energy control in the fields of electricity, heat supply, and the natural gas market, but also interventions to improve regulation of state oversight (control) in heat supply and advocates for expanding its powers to gas supply (in terms of technical operation of natural gas supply and distribution facilities). One should also note that, as of December 31, 2022, the SIES is heavily understaffed, with only 73% of full-time positions filled.

In addition, the State Agency on Energy Efficiency subordinated to the Ministry of Infrastructure shared a concern on the equipment compliance with the technical regulations on energy performance and eco-design. E.g., uniform application of some eco-design requirements to transformers would be problematic as they have been amended to enable installation of older equipment for ensuring fast repairs with donated equipment. Another case is proper certification of energy auditors (if applicable), as construction companies tend to ignore this issue due to the lack of enforcement – e.g. by not providing reports.

The Agency for Recovery referred to technical project documentation as a key ‘control point’, as the project must be implemented in strict accordance with such documentation. The Agency has confirmed the plans to conduct post-project audits using standard instruments of state construction expertise and independent technical supervision. However, the latter companies will be selected during the martial law under the closed (to public) procedure that, despite the high sensitivity of information regarding energy protection facilities, will also decrease the transparency of a post-project evaluation.

One of examples how such units could be set is a special Quality Control Department at Ukrenergo which conducts post-project control. The separate instrument called Operative Business Sanctions (OBS) is used to blacklist the contractors that were caught on manipulation with quality of delivered equipment and/or services during the implementation stage. In such cases OBS is applied as a 3-years ban for such a contractor(s) to participate in Ukrenergo tenders. The company also developed the Provider’s Code obliging all contractors to comply with it.

The NEURC will perform its control functions by analyzing reports of licensees, which should clearly differentiate between spending on repairs and capital investments, and executing control (i.e. running inspections). If a facility is restored with donor funds, it has to be included as spending under the

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20 As per CoM Resolution No. 899 of August 12, 2022: https://zakon.rada.gov.ua/laws/show/899-2022-%D0%BF#Text
investment program, marked “at the cost of other sources”, to avoid duplication of costs. Reflection in the balance sheet is also subject to the NEURC’s interest, as RAB tariffs are set for many licensees (natural monopolies) in electricity.

Recommendations

- **Define clear requirements for independent post-implementation technical assessment** of the projects, which could be performed by joint inspections of the State Inspectorate for Energy Supervision and independent specialists. The latter could be hired as part of project implementation units (PIUs) similarly to the approach used under the Ukraine Reforms Architecture program, with respective safeguards to ensure their independence from PIUs executives/managers;

- Develop **mechanisms for independent (external) post-project control**, clarify roles of public control authorities (State Audit Service, Accounting Chamber) for projects not involving any public financing. Audits performed by the public control authorities or non-governmental actors would be a substantial tool in corruption prevention as the internal capabilities of public agencies in energy are quite limited;

- Use the functionale of relevant public authorities (NEURC, SIES, SAEE etc.) for assessment, namely by allowing access to project documentation, incl. those related to specific equipment installed to check compliance with applicable regulations (allowing derogations for transitional use as a matter of ensuring energy security);

- More specifically, consider **strengthening capacities of SIES** by ensuring full staffing and execution of its powers to critical infrastructure facilities subject to recovery/reconstruction. The draft law proposed to comprehensively reform the state energy control in the fields of electricity, heat supply, and the natural gas market shall be considered, yet the regulatory changes should avoid duplication of functions (e.g., with the NEURC) and additional administrative burden on business entities.

- Develop a **template ‘Code of Good Conduct’ for all contractors** to sign and comply with, as a voluntary mechanism.